

## CHAPTER 3

# Planning for the Mission Autumn 1978

By the time April came around, when they finally signed the thing, . . . we had brainstormed that thing so much that I knew exactly what I wanted done.

Maj. Gen. James A. Johnson <sup>1</sup>

I think the Corps is probably the only organization in the whole damn world that could even do this.

Oswald I. Hewitt <sup>2</sup>

To the Corps of Engineers Camp David meant the possibility of a new mission. Soon after the two frameworks were signed, the Corps began planning for a part in building replacements for Israel's major Sinai airfields. On 22 September 1978, six days before Brown formally told Weizmann of American willingness to discuss aid, Assistant Secretary of Defense for International Security Affairs David E. McGiffert called Deputy Chief of Engineers Maj. Gen. Bates C. Burnell to the Pentagon. McGiffert wanted the Corps and the Air Force to provide lists of people and skills for a jointly staffed survey team. This group would visit Israel, examine potential sites, and explore the characteristics of and problems related to a construction mission.<sup>3</sup>

Burnell set up an informal planning group. His meeting with McGiffert had been on a Friday evening. On Saturday morning he met with two men who would be instrumental in developing any military construction project. Lee S. Garrett, the chief of the engineering division in the Military Programs Directorate, had been with the Corps for twenty-eight years and was a veteran of earlier missile construction programs. Frederick B. McNeely, chief of the construction division, had a background that included work on military projects from Greenland to Okinawa. The three knew only that whatever they might do in Israel would have to be completed

quickly. Burnell expected the work to involve two replacement bases. He thought they should consider contracting approaches and selection of a design firm. They discussed the possibilities but, with more meetings soon to take place in the Pentagon, could do little except note likely prospects and collect information. The office had almost no data on Israel, so McNeely sent an engineer to the Pentagon for maps. Garrett started thinking about a preliminary cost estimate. Within a week the Office of the Chief of Engineers also took the first steps toward contracting parts of the job by setting up selection boards to consider firms for site investigations and design work.<sup>4</sup>

A few days later the Corps took more formal action toward creation of a planning group. Lt. Gen. John W. Morris, the chief of engineers, looking for an experienced and capable colonel who might stay with the project and become its manager, brought in Col. James E. Hays to lead the planning effort. Thinking that he was going to the chief's office for a quick consultation, Hays left Champaign, Illinois, where he commanded the Corps' Construction Engineering Research Laboratory, with only "a change of socks . . . and a toilet kit." The other members of the task force—Cleon Moore, a construction expert from Mobile District, and T. R. Wathen, an engineer from San Francisco District—had arrived already. Capt. Robin R. Cababa, who served as executive officer and administrator, completed the group. Morris told Hays to assume that the Corps would build two airfields in the Negev Desert. The bases would have to be operational in three years. Morris wanted alternative concepts for government management and contractor execution of the mission, keeping in mind that only a minimum number of Corps of Engineers people could be involved. He placed the resources of his headquarters at Hays' disposal.<sup>5</sup>

The staff welcomed Hays, whose experience told him that on crash programs "people break down the bureaucratic walls, and the red tape gets rolled up and snipped off in a lot of areas." This project proved no exception: "Any time I called on people, they stopped what they were doing practically, and gave me what I needed. And as a result, it went a lot better than I think I had a right to expect."<sup>6</sup> Members of the military programs staff told Hays of the work already in progress. Donald W. Butler, deputy chief of Garrett's engineering division and the division's coordinator for this effort, reported that his office already had devised a preliminary schedule and estimated costs. McNeely, whose construction division had set up the selection boards, was represented on the project by Carl A. Damico. The Office of Counsel had also been ac-

tive; attorney M. Randall Head had been working with McGiffert's office in the Pentagon on enabling legislation.<sup>7</sup>

After a quick trip to Illinois for sartorial reinforcements, Hays spent his first week arranging for his group's operation. He reported directly to Maj. Gen. William R. Wray, who headed the Military Programs Directorate. All correspondence relating to the planning effort passed through Hays' office, which became known as the Corps of Engineers Near East Group or CENEG. The name screened from public view the specific mission being considered. Circumstances demanded such obscurity because the program was a long way from realization. Still to come were the actual peace treaty, the U.S. commitment to build the bases, and congressional approval of funds.<sup>8</sup>

During his short stay in Washington, Hays worked on two phases of the project plans. With the Air Force and McGiffert's office, he prepared for the survey team's trip to Israel. The team members had already been chosen, with Hays the senior man for the Corps of Engineers. Within the Office of the Chief of Engineers, he and the task force looked at a variety of contractual approaches to construction.<sup>9</sup>

One plan for the operation preceded the deliberations of the Hays task force. Garrett's office produced a framework known as TABII, or Two Air Bases in Israel. This proposal called for a main office staffed jointly by Corps personnel and a management contractor. Two subordinate offices, one at each site, would direct two construction consortia, each of which would include subcontractors for support, site investigation, design, procurement, and construction.<sup>10</sup>

Hays' group drew heavily on the knowledge of the headquarters staff in their investigation of contracting options. They looked at the experience of the Corps, notably the North African air base construction program of the 1950s, the ballistic missile facilities in the 1950s and 1960s, and more recent work for the National Aeronautics and Space Administration. They also considered possibilities based on the current organization. This structure consisted of fourteen divisions, each managing work in a large region. Twelve of these divisions were divided into two to four districts. Within the districts, area offices and project offices directly supervised specific projects. Heading this organization was the Office of the Chief of Engineers, which occasionally managed a program directly but usually contented itself with policy guidance. In 1978 this structure included three overseas divisions. Pacific Ocean Division, with responsibilities ranging from Hawaii to Japan and Korea, was remote from any projected mission in Israel. Middle East Division, which managed the construction program in Saudi Arabia from Riyadh

with a support staff called Middle East Division-Rear at Berryville, Virginia, could not participate because of the potential political effect of such a connection on relations with the Saudi government. Europe Division represented another possibility, as did creation of a new division. The group also considered setting up an office under an existing division.<sup>11</sup>

In addition to looking into organizational options, Hays and his group made assumptions that informed the development of specific proposals. First was the need to minimize the number of U.S. government people in Israel. They also postulated completion of work within three years and execution of design and construction by the United States. In addition, they shared McGiffert's understanding that design would involve replication of existing airfields based on current Israeli standards.<sup>12</sup>

With these guidelines, the task force drew up four concepts for the organization. All of the proposals called for a headquarters in Israel, with an executive office and a construction division. The office also would contain small cadres in other areas, including legal support, finance and accounting, administration, procurement, and personnel. Additional help in these fields would come from the permanent Corps organization. None of the four contained a separate engineering or design staff. Each followed the example of Middle East Division and relegated the design element to a state-side support activity, in this case a subordinate office that was usually called CENEG-Rear.<sup>13</sup>

The proposals that emerged in the middle of October reflected a fundamental uncertainty regarding the nature of the mission. The United States had made no formal commitment to any specific task, so planning remained hypothetical. Technical clarification regarding the job ahead awaited the removal of political ambiguities. Even that the mission would involve building two bases remained an assumption. The Israelis planned to remove a network of training facilities, fortifications, and depots, and the Israeli government wanted as much American help as it could get. With the precise extent of American aid undetermined, the preliminary schemes had to anticipate major U.S. involvement. Hence, one of the concepts included construction managers for two airfields and for "Army projects." Another provided for the even more amorphous category of "other projects."

The main differences in the proposals involved the number and type of contracts to be managed. The plan known as "concept A" called for executing all work through a single consortium of construction management contractors. This conglomerate would perform site investigations and surveys and prepare preliminary

design concepts. It also would direct three groups of contractors. One would provide support services, another would do the horizontal construction—roads, runways, utility lines, and the like—at both sites, and the third would erect all buildings. This scheme presupposed a strong similarity in the work at both sites. Moreover, of the four concepts, it alone did not specify a cost-type contract in which the contractor received reimbursement for all legitimate expenses and a preestablished fee, either fixed or based on specific standards and incentives.

The task force cited a number of advantages in concept A. Perhaps the most obvious was the small span of control required of Corps management with the work handled through a single contractor group. Other positive features involved rapid start of preliminary design and actual construction. The Hays group also saw disadvantages. This approach placed many layers of contractor management between the Corps and actual designers and constructors. So it reduced chances to discover and fix problems that might cause delays. Finally, it would cost more to manage a program through a management consortium than to do so directly.

The other three proposals called for cost-type arrangements with contractor joint ventures. They had in common the basic premise of any cost-plus contract: too little knowledge of what lay ahead to establish a clear scope of work on which a contractor could bid and make a commitment. The proposals also shared other assumptions, notably the need to provide operational bases before relocating Israeli Air Force units from their Sinai bases. All of them made possible a “fast-track” operation, with concurrent design, procurement, and construction. Consequently, all anticipated increased costs: fast-track work required intensive management and increased the chance of error. On the positive side, all three offered good opportunities for comparing plans, procedures, and costs for the two bases.

The first of these three proposals, dubbed concept B by the task force, called for a cost-plus-fixed-fee contract with a consortium for construction management. This group would handle the complex activities involved in base construction—design, procurement, mobilization, and support, as well as construction itself. Site investigation would begin immediately under a separate contract and revert to the consortium after it was established. Control by a single construction manager streamlined management. This plan also presented the greatest problem: dependence on a single manager increased the chance of failure. If the contractor backed out for some reason, the Corps would be left without an on-site organization to carry out the work.

Concept C, involving three prime contractors, resembled the plan that had been developed in Garrett’s office. Two joint ventures with cost-plus contracts would design and build one base each. The third consortium would support the Corps in managing the construction organizations. Like concept B, this scheme provided initially for separate site investigation contracts. These could be reassigned later to a prime construction contractor. The task force thought this plan offered the best possibility for correcting design errors during construction. On the debit side, it consigned direct management of the work to the contractors and offered only minimum opportunities for the exchange of experience between the sites.

The fourth proposal, labeled concept D, started with one cost-type contract for managing design and construction at both sites. The plan included at least four additional prime contracts for design, construction, and support at each base. More cumbersome and costly than the others, this scheme also required more than twice as many government employees in Israel.

<i>Concept</i>	<i>Project Staffing</i>	
	<i>Israel Office</i> <i>(construction division)</i>	<i>Support</i> <i>Office</i>
A.....	83 (46)	13
B.....	65 (24)	13
C.....	78 (33)	13
D.....	176 (76)	54

However, it maximized control, assured higher quality work, and enhanced chances of meeting a very tight schedule.

While Hays evaluated these options, Weizmann and Dayan came to Washington for talks on moving from the Camp David framework to an actual treaty. Weizmann also discussed American aid for withdrawal from the Sinai with a Department of Defense delegation led by Robert J. Murray, McGiffert’s deputy for Near Eastern, African, and South Asian affairs. Col. Haywood S. Hansell III, whose Middle East Task Group within Murray’s office coordinated Department of Defense activities regarding the bases, accompanied Murray. Hays also went, as did U.S. Air Force Brig. Gen. Paul T. Hartung, who had been chosen to lead the survey team to Israel.<sup>14</sup> Hartung had entered the service in World War II by enlisting as a sailor. His Air Force engineering experience came after a direct commission during the Korean War and included familiarity with the Corps of Engineers and its construction methods. He had worked with the Corps on the Atlas intercontinental ballistic missile program and on construction of the North Ameri-

can Air Defense Command's underground complex at Cheyenne Mountain, near Colorado Springs, Colorado. When he joined the survey team, he was deputy chief of staff for engineering and services at the Military Airlift Command. Hays found him personable and skilled at solving problems and was particularly impressed with his organizational approaches to problems.<sup>15</sup>

At the meeting Weizmann discussed possible sites for air bases and mentioned that some of them overlapped firing ranges and maneuver areas. He explained the need for multiple runways to lessen the likelihood that a single attack could close a base. Brig. Gen. Amos Lapidot, the vice commander of the Israeli Air Force, added that his air force considered protection of aircraft as the first priority in base design. He also told the Americans that the Israelis intended to design the bases themselves, although possibly with American help. Before the session ended, Weizmann expressed interest in securing more aid for relocation of army facilities. Murray turned that inquiry aside. The question would have to be raised with the president.<sup>16</sup>

Within a few days the task force reduced the number of proposals to two. Essentially, these resembled concept B, which called for management through a cost-plus-fixed-fee contract with one construction management consortium, and concept C, which specified three cost-type contracts—two with construction joint ventures and another with a construction manager. As Hays noted, neither allowed for a high degree of government control. Both involved high management costs, although the single-contractor "B" plan would be more expensive and harder to manage.<sup>17</sup>

The task force also suggested two possible organizations for the Corps' project office. One put the office directly under the Office of the Chief of Engineers and attached a stateside support group to the project headquarters. This arrangement offered a flexible organization dedicated entirely to the project, although it required assembly and lacked interim capability. The other proposal, for an office that also reported directly to Washington but was linked with an engineer division or one of its districts for support, provided a framework on which to build. Consequently, it could start operations more quickly. The main drawback came from the inability of any division to focus on this project to the exclusion of its other work. Either of these organizations could be tied to one of the suggested contracting concepts.<sup>18</sup>

Meanwhile, McNeely's construction division examined the need for support from the United States. A staff study concluded that help was needed in a variety of administrative and technical areas and identified North Atlantic Division and Missouri River Di-

vision as those best able to aid in the project. North Atlantic was one time zone closer, had better access by air, and had more overseas experience, so it seemed the better choice. After Wray approved this recommendation, a different issue related to a support organization arose. On 30 October Deputy Chief Burnell, acting as chief of engineers in the absence of Morris, approved involvement of North Atlantic Division in the work. He also ordered North Atlantic to devise a plan for managing the entire mission from its New York office. Burnell stopped short of assigning the job to New York but obviously inclined in that direction. McNeely said, "They already had the mission anyway, as far as we were concerned." Only Hays still saw the project as tied directly to Washington.<sup>19</sup>

Meanwhile, the Hays group began to expand. Aided by McNeely and Garrett, with their widespread contacts within the Corps, Hays brought more engineers into the office to develop lists of tasks for possible contracts and to prepare mission statements for the components of an expanded task force office. At the same time, personnel specialists arrived to prepare job descriptions and recruit employees. The task force appeared to be evolving into a project management office. Moreover, by using the acronym CENEG for itself and for the project office that would run the program in Israel, the group's reports tended to reinforce that impression.<sup>20</sup>

Burnell's order did not surprise North Atlantic Division. Maj. Gen. James A. Johnson, the division commander, had been thinking about the project since September. "I started planning for it," Johnson later said, "actually before they signed the Camp David accord." He did so because the proceedings there convinced him there was "a strong possibility that the Corps of Engineers would get involved, particularly in some of those things that require construction support." He also considered options for managing such a construction mission. Middle East Division was in Saudi Arabia, whose government would probably resent sharing an engineering organization with Israel, and Europe Division had too much work already. Therefore, he concluded, any project resulting from the Camp David accords would be managed either by the Office of the Chief of Engineers or through it by a stateside division.<sup>21</sup>

Johnson shared Morris' view of the Washington office as a policy headquarters rather than an operational one. He also agreed with Morris' opposition to special offices for specific projects. Morris thought this approach created problems. "There was," he explained, "a standard organization with fixed responsibilities." It was better "to do things within the framework than to set up special cells which had to be defined." Special offices required new statements of responsibilities and were likely to overlap with exist-

ing components of the organization. Both Johnson and Morris thought the Corps program should be executed through the divisions by districts or similar organizations.<sup>22</sup>

Johnson actively pursued the airfield mission, just as he had always eagerly sought new jobs. When the chief's office had sought a district to do a small dredging job in Gabon, he took the work for Philadelphia District. Success there, he later recalled, "helped [Philadelphia's] morale and gave them a little extra work to do." So weeks before Burnell told him to plan for the job, he went to Washington and told Morris and Burnell of his interest. He thought his division "the logical command to do it" because of North Atlantic's experience with cost-plus base construction in North Africa, Greenland, and elsewhere. Besides, he later said, "it was a great project." So without an order to proceed or assurance that the Corps would have work in Israel, he informally assigned consideration of the job to a small group of senior staff members.<sup>23</sup>

At this juncture the chief's office prepared to participate in the survey team. That group would bring back useful answers only if it posed the right questions. General Wray asked his engineering division for a study of the requirements for operational air bases and of the logistical support needed for construction. Garrett selected a task force led by Donald Butler. John F. Reimer, the chief estimator in the division and a member of the group, said they set out "to ask the proper questions and to ascertain the construction requirements as well as the functional requirements of such a base." In a week the group listed the data needed for analyzing the job, including runway lengths, pavement thickness, the number of and types of aircraft, types of soil, and the number of people who would reside at the bases. They also raised questions about labor, materials, and equipment, whether Israeli, American, or other sources would be used.<sup>24</sup>

The survey team set out for Israel with the engineering division's shopping list in hand. After briefings on 2 and 3 November by Hartung, the Defense Intelligence Agency, and the State Department, the team flew to Tel Aviv. Composed of Air Force officers and Corps civilian employees, with Hays the only engineer officer from the Corps, the group represented a substantial pool of knowledge on base development, ranging from site investigations and cost estimating to base activation. The Israelis were gracious hosts, treating the team well and surprising its members with their openness. Weizmann even insisted that Israeli officers speak English among themselves at meetings with the Americans. Lt. Col. Richard G. Rhyne, an Air Force team member who had been in Is-

rael regarding the transfer of American equipment to the Israelis, said they had never before been as helpful.<sup>25</sup>

It was indeed unusual for the Israel Defense Force to show potential base sites or classified documents to foreigners. In the previous twenty-four years, the Israelis had absorbed massive amounts of American military aid.<sup>26</sup> In all that time they had never accepted the American advisers who customarily went with the hardware. Back in 1954, the United States had agreed for the first time to an Israeli request for arms and wanted to send fifty to one hundred advisers with the weapons. Moshe Dayan rejected the offer: Israel was a sovereign nation, and its defense plans and preparations were state secrets. No foreign advisers, Dayan said, would ever set foot on an Israeli military installation. Yet in November 1978, a government that included Dayan as foreign minister was uncharacteristically open.<sup>27</sup>

The team learned a great deal about the Israeli Air Force. In Tel Aviv members were briefed on Israeli air strategy and base configuration and toured potential base sites with their hosts. The Israelis also took the Americans to an active base and showed them what happened when the alarm sounded. Hays remembered "standing there watching in amazement" as an air base came alive. Sirens blared and pilots dashed to their aircraft, which were fueled and armed in the shelters—like "an Indianapolis 500 pit stop," according to one American—while the fliers in their cockpits got instructions by radio. When all was completed, the planes taxied onto the runways and took off. The first plane was airborne in three minutes. As an Israeli with the team said, "That's not bad."<sup>28</sup>

After initial discussions, the team broke up into small specialized groups. Each operated separately with its own transportation and escorts from the Israeli Air Force. The American embassy in Tel Aviv provided office space and information as well as a central location where team members could discuss their findings privately. Hosts and visitors reached a basic understanding of their respective needs and abilities. The Israeli Air Force needed bases for five squadrons—150 aircraft—in the Negev when Israel vacated the Sinai. They saw these units spread over three bases with ultimate expansion to eight squadrons. Meanwhile, the Americans formed ideas about the cost of such a project. Estimators Ronald J. Hatwell of the Office of the Chief of Engineers and Air Force Lt. Col. David Bull decided that two bases accommodating five squadrons would cost just over \$1 billion. As Hays noted, their work was critical: "They were a real keystone in the whole organization of the report because of the importance of the cost data."<sup>29</sup>

Hartung emphasized that the United States could build operational albeit incomplete airfields for Israel in three years. Facilities

and buildings unrelated to the ability to fly and fight might take longer to finish. He considered this distinction important. A misunderstanding might create false expectations and damage relations between the two nations.<sup>30</sup>

When the survey team returned home, its members briefed policy makers in the Department of Defense. These sessions stressed that timely completion of a construction job in Israel required quick decisions and early funding. Delays at the start would be costly at the end. Hartung explained the team's most important conclusions. The Israeli Air Force, he wrote, would have preferred to build the bases under their own control. However, they lacked experience with fast-track construction and decided that they could not do the work in less than five or six years. Moreover, with the Israeli construction industry "virtually saturated," a job this big would adversely affect the small country's economy; the sudden increase in demand for building materials and labor would boost an already very high rate of inflation. So, to meet a tight schedule and avoid economic damage, the Israelis decided to import all materials and labor for the job and agreed to American involvement in a fast-track operation with simultaneous design, procurement, and construction.<sup>31</sup>

With the answers brought back by the survey team, Reimer and his colleagues developed the initial figure. In addition to knowledge of the cost of previous efforts, the estimate required that they envision the details of work not yet started and anticipate conditions that might confront the builders.<sup>32</sup> The estimators used data brought back by Hartung and aerial photographs of the Sinai bases as the basis for calculating the approximate number and type of buildings. McNeely's office provided information on the effect of tight construction schedules and procurement of materials that had to be ordered well in advance. The Army's experience in military construction, which was quantified in regulations, yielded unit cost data for standard facility designs and cost factors for construction in isolated and remote locations.<sup>33</sup> The estimators divided the project into its vertical and horizontal parts, the latter including runways and roads as well as utilities and other underground systems. Ordinarily vertical construction was more labor intensive, and the estimators calculated the ratios of labor and machinery for the expected amounts of these different types of work. To this they added the cost of logistical and administrative support. In December they came up with a tentative figure: \$1.06 billion.<sup>34</sup> Their total, perhaps more art than science, turned out to be remarkably accurate. This figure was revised several times early in the following winter. Finally the estimators settled on \$1.04 billion.<sup>35</sup>

Still, the nature of American participation was unclear. Hartung thought the possibilities ranged from an advisory role to total project control. In any case, he believed that the Corps of Engineers should represent the United States in construction matters. The Corps, he noted, had “the people with fast track construction experience and the organization to accomplish the task.” The survey team concluded that normal military construction procedures should be used if the Defense Department became involved in construction. The Corps would be design and construction agent. The Air Force would provide a small regional civil engineer team that would be the Corps customer and would represent the U.S. government with the Israeli Air Force, which was the user.<sup>36</sup> Such a relationship resembled the normal arrangement for air force construction, except that the U.S. Air Force was usually the user as well as the customer.

Even with American construction management, the Israeli government had major responsibilities. These included deciding early on design criteria, compiling rainfall and runoff data for the sites, and gathering information on the nature and availability of local foods and fuels. The Israelis also faced the expense and effort of dismantling bases and moving forces out of the Sinai. In addition, they had to provide utilities—water, electricity, and telephones—to the sites. The government of Israel could support the program in other ways, ranging from providing translators and repair of haul roads to housing and on-site transportation and security. Hartung advised against involving the host country. He argued that these activities involved “resources required to accomplish the project, and if assigned to [the government of Israel], they are not under the contractor’s control.” Reliance on any outside party would restrict the contractor’s ability to meet the rigid schedule by intensively managing all resources.<sup>37</sup>

The survey team was still in Israel when General Johnson formally set up his task group to plan execution. On 13 November 1978, he told three senior staff members with experience in accelerated overseas construction to devise a management plan. This team consisted of Frank Pagano, chief of the engineering division; Alvin Vinitsky, chief of construction operations division; and Oswald Hewitt, comptroller. The only person missing, Vinitsky later said, was the man who would actually manage the project. “The guy that’s got to live with it” was not there. Johnson assigned them an office that came to be called the Israeli war room. He directed his deputy for military construction, Col. Paul Bazilwich, to assist the group. They had one week to produce a plan.<sup>38</sup>

For the next five days the task force set aside all other work and concentrated on this assignment. They started with little information. Colonel Hays, whose report was still incomplete, told them what he had seen. They also had U.S. Air Force manuals on air base facilities and layout drawings of Eitam and Etzion. "All we knew," Vinitsky recalled, "was that we were going to build airbases. We had very little data."<sup>39</sup>

General Johnson did give the group some planning guidelines. He wanted a four-part organization: a headquarters in Israel, a stateside support group, and two area offices, one at each base. He also wanted the staff limited to 180 to 200 people, one-third of them military. This unusually heavy use of soldiers would assure that the project did not draw too heavily from the largely civilian management and in turn disrupt the stateside construction program. It also would give the engineer officers some important experience. Johnson also thought an organization with a large number of military people would be easy to dismantle later. "I want the organization developed quickly, and I want it buried quickly," he said. He estimated the life of the office as four years, with three to do the job and another to close out the operation. Because soldiers more readily accepted rapid reassignments, they were best suited for this project.<sup>40</sup>

Johnson wanted an engineer brigadier general in charge of the work in Israel. The political environment and the rigorous schedule demanded high-level leadership. He also wanted someone with the experience and strength to stand up to pressures from the U.S. Air Force and the Israelis. "He's got to be tough," Johnson concluded.<sup>41</sup> Morris turned down the request. He saw two organizational choices: an independent office in Tel Aviv under a general or a smaller office with a streamlined staff under a colonel and attached for support to a stateside division. The former would require staff to handle accounting, personnel support, logistics, and administrative matters. The latter could draw much of this help from the division to which it was assigned. In any case no brigadier generals were available. Besides, colonels in the Corps of Engineers had managed more complicated construction jobs than this. At Cape Canaveral, for example, a colonel had overseen erection of a complex network of facilities for the space program. Morris was sure "we could run the job site with a colonel. Colonels usually build air fields."<sup>42</sup>

With so little to go on, numerous assumptions entered the task force's plans. Primary among them was the expectation that the work would be done through an engineer division—preferably their own—by an organization that resembled an engineer district.

The task force also assumed that the tight schedule and the lack of firm construction criteria would require the use of letter contracts to start work and cost-plus-fixed-fee contracts to carry it out. Because the group thought complete design of the air bases would be required, they sought prime construction contractors with full design capabilities.<sup>43</sup> Hewitt favored combining these contractual and organizational arrangements. "It enabled us to get a faster start by getting hard-to-acquire expertise aboard in a hurry and moving," he said. "If we'd had only Corps people, we'd have to make a lot of contacts with people we know and then get the approval of their chiefs to use them."<sup>44</sup>

In theory the Corps had a framework for rapid mobilization of engineer districts staffed by a variety of experts. Each of three "redistricts" was to have a nucleus of civilians designated in advance. In an emergency the Corps could assemble these organizations—one each from the South Atlantic, North Atlantic, and South Pacific Divisions—and send them overseas on short notice. The reality of the situation in 1978 did not match the concept. The task force considered the possibility of mobilizing a ready district. Vinitsky said it would take too long, and Hewitt doubted the availability of people with needed skills, especially with a number of districts occupied with floods in the United States.<sup>45</sup> Hays had seen the rosters and found that "most of them were several years out of date."<sup>46</sup> Basilwich summed up the ready district as "a paper thing meeting a paper requirement."<sup>47</sup> Because of the problems involved in quickly assembling enough Corps employees to manage the job, the group sought a contractor that could support and augment project management.<sup>48</sup>

Relying on these premises, the task force went to work. Daily the group briefed Johnson, analyzed their plan, picked it apart, and rebuilt it. With Pagano nominally in charge, they kept the project informal, avoided assigning portions to individuals, and worked together. When necessary, they spent long hours on the job and consulted other members of the staff. Johnson was almost a fourth member of the team. Vinitsky thought he "enjoyed it the same way we enjoyed it with regard to getting your feet wet, a hands-on operation." The others also enjoyed working with Johnson. When they thought he was wrong, they told him. Even more important, he listened, suggested, and made decisions only after considering the views of the others.<sup>49</sup>

The group finished the report on Friday evening and produced it the next day. Pagano and draftsmen from New York District prepared slides for a presentation to Burnell in Washington. Vinitsky spent Saturday at a photocopying machine. The product

of their week-long effort was a 22-page proposal. Not to be outdone by the Hays task force, they stenciled diagonally across the title page their own acronym, CENADNEG, for Corps of Engineers North Atlantic Division Near East Group.<sup>50</sup>

On Monday, 20 November, Johnson and his task force took the CENADNEG proposal to Washington. They presented a straightforward plan, known as the blue book because of its binding. It tersely covered the major points, ranging from the supposition that the project would involve two sites to their understanding that the design of the new bases would replicate the old. The document contained several important lists. One included the names of North Atlantic personnel in construction, engineering, and support areas with experience in cost-type or overseas work. Another identified laws and regulations for which waivers should be sought. For example, the 1969 National Environmental Policy Act required a government construction agency to file an environmental impact statement before starting work. This requirement was irrelevant to work in a foreign country. Still other lists bore the names of firms that might be able to handle portions of the work.<sup>51</sup>

The proposal, which resembled concept C of Hays' group, included an organizational concept and charts for elements of the project office. It called for either three or five cost-plus-fixed-fee contracts. A management contractor would assist with supervision, conduct analyses, and prepare reports. The work would be done either by two joint ventures, one at each site for design and construction; or by four, with separate firms for design and construction. This latter possibility, which allowed for the merger of the designers with the respective builders later in the project, was rejected. The scope of design work seemed too vague for separate contracts. Moreover, the fast-track concept, with procurement and construction starting while design continued, required close coordination. Consolidation of design and construction in a single joint venture seemed the best way to pull together the designer and the builder.<sup>52</sup>

While the framework borrowed from work that had been done in Washington, the project office as seen by the North Atlantic Division had one original feature. In addition to the executive office, for which Johnson still wanted a brigadier general, the structure contained four divisions, three of which appeared routinely designed. Engineering consisted of 17 people, construction had 33, and program management consisted of 10. The fourth, the resource management office, was the largest at 38. It subsumed a number of usually separate functions, including the personnel office, procurement and supply, administrative services, and office of

counsel. "Resource management," Hewitt envisioned, "would handle everything except engineering and construction."<sup>53</sup>

Johnson shared Hewitt's enthusiasm for this arrangement. Engineer regulations give the resource management office responsibility for a wide range of financial functions, notably the standard comptroller duties of "receiving, controlling, accounting for and issuing" appropriations made by Congress for the Corps of Engineers. Other areas of responsibility involved long-range planning, manpower management, contracting and procurement, and employee training. Johnson adopted a more literal and broader view, asserting that the resource manager's job was managing resources. Consolidation of staff offices that managed resources of one kind or another, he believed, increased overall efficiency.<sup>54</sup>

Others shared their belief in a strong resource manager. McNeely's experience with overseas programs convinced him that the Corps frequently paid insufficient early attention to property accountability and documentation of financial transactions. He agreed that the resource manager should have ample staff for control of equipment and materials. The project always got built, Vinitsky added, noting that potential trouble lay in failure to document expenditures and directions to contractors. McNeely, Hewitt, and Vinitsky all remembered cost-plus overseas missions where indifference to these details had brought trouble, particularly the administrative and financial nightmare that developed in the wake of construction of the North African airfields in the 1950s. Nevertheless, even McNeely saw the proposal as an effort to create a large enough organization to justify a very high grade for whomever might take charge.<sup>55</sup>

The proposal received a hostile reception from most of the Washington staff. Johnson recalled that Col. Donald H. Morelli, chief of the resource management office in the headquarters, supported the idea. However, Morelli's own suggestions for staffing the office, made the preceding week, were relatively modest. He called for eleven people concentrating on financial management in three areas: budget and programs, audit, and finance and accounting. Others in the chief's office insisted on a more conventional arrangement, with resource management performing comptroller functions such as those in Morelli's proposal. Morris' aversion to experimental organizations may have applied here too. Separate staff offices would handle personnel matters, provide legal advice, and manage other support services.<sup>56</sup>

Despite rejection of this part of their plan, the briefing went well. North Atlantic got the job. Vinitsky thought that Burnell had made up his mind even before the briefing. McNeely, who worked closely

with Burnell during this period, thought so too. Hays may have been disappointed, but he and the staff raised no major objections.<sup>57</sup>

About the time that North Atlantic received the assignment, Johnson decided that he needed an expert in management and administration as well as a military commander for the project office. He chose an old friend and classmate at the Military Academy, Hugh J. Bartley, who had retired from the Army as a brigadier general in 1976 after serving on the Army staff as director of plans, programs, and budget in the Office of the Deputy Chief of Staff for Operations. Johnson invited Bartley to his Governor's Island home for Thanksgiving dinner and made his offer. He wanted Bartley to leave a consulting job with the University of Pittsburgh Medical School, taking a pay cut of over \$100 per day. As one of the first project people in Israel, he would set up the organization. After a walk around the island, Bartley agreed, although he was not convinced that a peace treaty would materialize. He would leave Pittsburgh as soon as Johnson called.<sup>58</sup>

Johnson also knew who he wanted to command the office in Israel. Knowing that he would be unable to get a brigadier general or Colonel Hays, who did not want to go to Israel, Johnson proposed Col. Clarence D. Gilkey for the job. Gilkey's experience included duty with a military training mission in Saudi Arabia in 1966–1967. He also had spent three years as Portland District engineer before going to West Point as the facilities engineer in 1976. He was still there when Johnson decided he wanted him. Gilkey's nearby location made it possible to include him in planning from a very early date. Still in November, Johnson asked the deputy superintendent at West Point to release Gilkey from duty at the academy. Here again Johnson used his personal friendships. Brig. Gen. Charles W. Bagnal had been a West Point cadet when Johnson was his tactical officer. Bagnal shared Bartley's skepticism about the likelihood of the mission but agreed to release Gilkey after Johnson promised to find a replacement. So Gilkey was available for briefings and planning sessions in New York.<sup>59</sup>

Before Johnson could do much more, important developments had to take place. A treaty ratifying the Camp David commitments remained to be signed. Next, Congress would have to appropriate money for the job. Only then could the Corps select contractors and hire people for work in Israel. The Corps had prepared for these actions by choosing an organization to carry out the job, settling on a tentative structure for it, and preparing lists of likely participants. As 1978 ended, the Corps was well along in its preparations to make good the American promise to provide operational airfields to replace the Sinai bases.

## Notes

1. Interv, author with Maj Gen James A. Johnson, Sep 83, Fort Belvoir, Va.
2. Interv, author with Oswald I. Hewitt, Jan 80, New York City.
3. Memo, Maj Gen Bates C. Burnell, Acting COE, for ASD (ISA), 25 Sep 78, sub: Construction Support to Near East Activities, METG files; Frederick B. McNeely, Early Days of Israeli Airbase Program, Encl to Ltr, McNeely to Maj Gen Bennett L. Lewis, NAD, 10 Apr 80, sub: Early Days of Israeli Airbase Program, IABPC, 11/6.
4. McNeely, Early Days of Israeli Airbase Program, Encl to Ltr, McNeely to Lewis, 10 Apr 80; Interv, author with Frederick B. McNeely, Sep 83, Washington, D.C.; DF, William R. Darnell, Engineering Division, to Lee S. Garrett, Chief, Engineering Division, MC, OCE, 27 Sep 78, sub: AE Selection Boards for Two Site Investigation Firms and Two Design Firms for Middle East Projects, IABPC, 1/4.
5. Interv, author with Col James E. Hays, Dec 79, Alexandria, Va.; Chronology of Decisions/Guidance, n.d., IABPC, 89/3; Maj Gen William R. Wray, comments on draft MS, IABPC, 93/10.
6. Hays interview.
7. Ibid.; Col James E. Hays, Minutes of CENEG Meeting, 4 Oct 78, IABPC, 1/5.
8. Hays, Minutes of CENEG Meeting, 4 Oct 78.
9. Hays interview.
10. Ibid.; TABII Contracting Plan, IABPC, 1/5.
11. Hays interview.
12. DF, Hays to OCE Staff, 23 Oct 78, sub: Request for Comments/Concurrence: Organizational Concepts for Accomplishment of CENEG Mission, IABPC, 1/5.
13. Concepts A (13 Oct 78), B (13 Oct 78, revised 16 Oct 78), C (13 Oct 78, revised 16 Oct 78), and D (18 Oct 78), all in IABPC, 1/5. This narrative is based on these documents.
14. MFR, Hays, 18 Oct 78, IABPC, 1/5; Dayan, *Breakthrough*, p. 199.
15. Hays interview; USAF Office of Public Affairs Biography, Brigadier General Paul T. Hartung, in Office of Air Force History, Bolling Air Force Base, Washington, D.C.
16. Hays interview; MFR, Hays, 18 Oct 78.
17. DF, Hays to OCE Staff, 23 Oct 78.
18. Ibid.
19. David A. Spivey, Staff Study: CENEG Support, 25 Oct 78, IABPC, 1/5; DF, Maj Gen William R. Wray to COE, 26 Oct 78, sub: Recommendation of Support Division for CENEG Operations, with comment by Burnell, 30 Oct 78, IABPC, 1/1; McNeely interview, Sep 83.
20. Capt Robin R. Cababa, CENEG Status Report, 31 Oct 78, IABPC, 1/5; Hays interview.
21. Johnson interview.
22. Ibid.; Interv, author with Lt Gen John W. Morris (Ret.), Mar 83, Arlington, Va.
23. Johnson interview; John W. Chambers, *The North Atlantic Engineers: A History of the North Atlantic Division and Its Predecessors in the U.S. Army Corps of Engineers* (New York: NAD, 1980), p. 91.
24. In addition to Butler, the task force included estimators John Reimer and Ronald Hatwell from the engineering support branch, and architect Thomas

Payne, chief of the architectural and building systems branch. There were also four members from the advanced technology branch: chief Harold McCauley, an expert on hardened structures; D. S. Reynolds, also a specialist in hardened structures; August Muller, an environmental engineer specializing in water and sewer systems; and paving expert Samuel Gillespie. Interv, author with John F. Reimer, Feb 82, Washington, D.C.

25. Cababa, CENEG Status Reports, 31 Oct and 1 Nov 78, IABPC, 1/5; Hays interview.

26. For a summary of U.S. aid to Israel, see U.S. Congress, General Accounting Office, *U.S. Assistance to the State of Israel*, Report 83-51 (Washington, D.C.: GPO, 1983).

27. Wilbur C. Eveland, *Ropes of Sand: America's Failure in the Middle East* (New York: W. W. Norton, 1980), p. 86; Yoram Peri, *Between Battles and Ballots: Israeli Military in Politics* (Cambridge, England: Cambridge University Press, 1983), p. 6.

28. Hays interview; Milton, "Mideast Survey: Problems and Prospects," p. 71; Ze'ev Schiff, *A History of the Israeli Army, 1874 to the Present* (hereafter cited as *The Israeli Army*) (New York: Macmillan, 1985), p. 137.

29. Hays interview; Memo, Brig Gen Paul T. Hartung for Maj Gen William D. Gilbert, 30 Nov 78, sub: Methods of Accomplishing/Managing Israeli Air Base Construction, IABPC, 89/3.

30. Memo, Hartung for Gilbert, 30 Nov 78.

31. Hays interview; Memo, Hartung for Gilbert, 30 Nov 78.

32. *ENR* 210 (28 April 1983): 182.

33. Reimer interview, Feb 82.

34. AR 415-17, *Construction: Cost Estimating for Military Programming*, Change 1 (Washington, D.C.: HQDA, 1 Aug 78). This version of the regulation did not include a location adjustment factor for construction in Israel. The next revision, issued in February 1980, did.

35. Reimer interview, Feb 82.

36. Memo, Hartung for Gilbert, 30 Nov 78.

37. Memo, Brig Gen Hartung for DASD (ISA) Robert J. Murray, Dec 78, sub: GOI Participation in Relocation from the Sinai to the Negev, IABPC, 89/3.

38. MFR, Oswald I. Hewitt, 13 Nov 78, sub: NAD Task Force CENEG Established, IABPC, 10/8.

39. Interv, author with Alvin Vinitsky, Jan 80, New York City.

40. Johnson interview.

41. Ibid.

42. Morris interview; Ltr, Morris to Ambassador Samuel Lewis, 14 Aug 80, IABPC, 7/5; Johnson interview.

43. Hewitt and Vinitsky interviews.

44. Hewitt interview.

45. ER 1-1-190, *Administration: Establishment of REDI DIST* (Washington, D.C.: OCE, 12 Apr 68); Hewitt and Vinitsky interviews.

46. Hays interview.

47. Interv, author with Col Paul Basilwich, Jan 80, New York City. Toward the end of 1982, the Corps brought the concept and the reality of the ready district into line by abolishing the concept. EC 310-1-438, *Military Publications: Rescission* (Washington, D.C.: OCE, 10 Dec 82), rescinded the regulation that had set up the ready district concept as "no longer required."

48. Hewitt and Vinitsky interviews.

49. MFR, Hewitt, 13-20 Nov 78, sub: Task Force Progress, IABPC, 10/8; Hewitt and Vinitsky interviews.

50. MFR, Hewitt, 13–20 Nov 78, sub: Task Force Progress; Vinitsky interview; CENADNEG proposal, IABPC, 10/6.

51. CENADNEG proposal.

52. Ibid.; McNeely interview, Sep 83.

53. CENADNEG proposal; Hewitt interview.

54. ER 37–3–7, *Financial Administration: Budgeting and Funding for Military Functions Appropriations* (Washington, D.C.: OCE, 30 Nov 79); OM 10–1–1, *Organization and Functions: Office of the Chief of Engineers* (Washington, D.C.: OCE, 3 Nov 80), p. H–1; Johnson interview.

55. McNeely interview, Sep 83; Vinitsky interview. On the North African program, see MS, Karl C. Dod, *Overseas Military Operations of the Corps of Engineers, 1945–1970*, ch. 15, *Airfield Construction in North Africa*, Office of History, HQ USACE, files. Also see U.S. Congress, House of Representatives, Committee on Appropriations, Subcommittee on Military Public Works, *Hearings. Investigations of Military Public Works, Part 4, Moroccan Air Base Construction*, 82d Cong., 2d sess., 1952; U.S. Congress, House of Representatives, Committee on Appropriations, Subcommittee on Military Public Works, *Report. Moroccan Air Base Construction*, 82d Cong., 2d sess., 1952.

56. Hewitt and Johnson interviews; DF, Col Donald H. Morelli to DAEN-MPT [Col Hays], 25 Oct 78, sub: Comments and CENEG Structure, IABPC, 1/5.

57. Hewitt, Johnson, and Vinitsky interviews; McNeely interview, Sep 83.

58. Johnson interview.

59. Ibid.